# BEST AVAILABLE COPY

NDDQ LLP

Serial No. 10/088,400

HANTKE et al.

0480/01219

#### APPENDIX I:

#### CLAIM AMENDMENTS:

Cancel Claims 5, 9 and 17 to 19, and amend Claims 1, 4, 11, 15, 16 and 20, as indicated in the following listing of the claims:

1. (currently amended) Rate-controlled release particles, comprising, in a polymer matrix consisting of a homo- or copolymer of N-vinylpyrrolidone, an active ingredient as a solid dispersion in a the polymeric matrix consisting of a homo- or sepolymer of N vinylpyrrelidene and from 5 to 25% b.w. of hydroxypropyl methyl cellulose, and optionally further comprising a surfactant, and wherein the active ingredient is

a compound of formula I

a N-oxide, a pharmaceutically acceptable addition salt or a stereochemically isomeric form thereof, wherein

- is CR5 or N;
- is CH, CR4 or N; A
- is 0, 1, 2, 3 or 4;
- is -NR1R2 or when Y is CR5 then Q may also be hydrogen;
- R1 and R2 are each independently selected from hydrogen, hydroxy,  $C_{1-12}$ alkyl,  $C_{1-12}$ alkyloxy,  $C_{1-12}$ alkylcarbonyl,  $C_{1-12}$ alkyloxycarbonyl, aryl, amino, mono- or di(C1-12alkyl)amino, mono- or  $di(C_{1-12}alkyl)$ aminocarbonyl

wherein each of the aforementioned C1-12alkyl groups may optionally and each individually be substituted with one or two substituents each independently selected from hydroxy, C1-6alkyloxy, hydroxy-C1-6alkyloxy, carboxyl, C1-6alkyloxycarbonyl, cyano, amino, imido, aminocarbonyl, aminocarbonylamino, monoor  $di(C_{1-6}alkyl)$  amino, aryl and Het; or

- R1 and R2 taken together may form pyrrolidinyl, piperidinyl, morpholinyl, azido or mono- or di(C1-12alkyl)aminoC1-4-alkylidene;
- is hydrogen, aryl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxycarbonyl,  $C_{1-6}$ alkyl substituted with  $C_{1-6}$ alkyloxycarbonyl; and

BEST AVAILABLE COPY

#### HANTKE et al.

0480/01219

- each  $R^4$  independently is hydroxy, halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, aminocarbonyl, nitro, amino, trihalomethyl, trihalomethyloxy, or when Y is  $CR^5$  then  $R^4$  may also represent  $C_{1-6}$ alkyl substituted with cyano or amino carbonyl;
- R5 is hydrogen or C1-4alkyl;
- L is  $-X^1-R^6$  or  $-X^2-Alk-R^7$  wherein
  - R6 and R7 each independently are phenyl or phenyl substituted with one, two, three, four or five substituents each inhalo, dependently selected from hydroxy,  $C_{1-6}$ alkyl, C1-6alkyloxy, C1-6alkylcarbonyl, C1-6alkyloxycarbonyl, formyl, cyano, nitro, amino, and trifluoromethyl; or when Y is CR5 then R6 and R7 may also be selected from phenyl substituted with one, two, three, four or five substituents each independently selected from aminocarbonyl, trihalomethyloxy and trihalomethyl; or when Y is N then R6 and R7 may also be selected from indanyl or indolyl, each of said indanyl or indolyl may be substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy, C1-6alkyl, C1-6alkyloxy, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyloxycarbonyl, formyl, nitro, amino, and trifluoromethyl;
  - $X^1$  and  $X^2$  are each independently  $-NR^3-$ , -NH-NH-, -N=N-, -O-, -S-, -S(=O)- or  $-S(=O)_2-$ ;

Alk is C1-4alkanediyl; or

- when Y is CR5 then L may also be selected from C<sub>1-10</sub>alkyl, C<sub>3-10</sub>alkenyl, C<sub>3-10</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, or C<sub>1-10</sub>alkyl substituted with one or two substituents independently selected from C<sub>3-7</sub>cycloalkyl, indanyl, indolyl and phenyl, wherein said phenyl, indanyl and indolyl may be substituted with one, two, three, four or where possible five substituents each independently selected from halo, hydroxy, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, C<sub>1-6</sub>alkyloxycarbonyl, formyl, nitro, amino, trihalomethyl, trihalomethyloxy and C<sub>1-6</sub>alkylcarbonyl;
- arylis phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, nitro and trifluoromethyl;
- Het is an aliphatic or aromatic heterocyclic radical; said aliphatic heterocyclic radical is selected from pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, morpholinyl, tetrahydrofuranyl and tetrahydrothienyl REST AVAILABLE COPV

#### HANTKE et al.

0480/01219

wherein each of said aliphatic heterocyclic radical may optionally be substituted with an oxo group; and said aromatic heterocyclic radical is selected from pyrrolyl, furanyl, thienyl, pyridyl, pyrimidinyl, pyrazinyl and pyridazinyl wherein each of said aromatic heterocyclic radical may optionally he substituted with hydroxy,

or a compound of formula II

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

the N-oxides, the pharmaceutically acceptable addition salts, quaternary amines and the stereochemically isomeric forms thereof, wherein

 $-b^1=b^2-C(R^{2a})=b^3-b^4=$  represents a bivalent radical of formula

-CH=CH-C(
$$R^{2a}$$
)=CH-CH= (b-1);  
-N=CH-C( $R^{2a}$ )=CH-CH= (b-2);  
-CH=N-C( $R^{2a}$ )=CH-CH= (b-3);  
-N=CH-C( $R^{2a}$ )=N-CH= (b-4);  
-N=CH-C( $R^{2a}$ )=CH-N= (b-5);  
-CH=N-c( $R^{2a}$ )=N-CH= (b-6);  
-N=N-C( $R^{2a}$ )=CH-CH= (b-7);

- q is 0, 1, 2; or where possible q is 3 or 4;
- R1 is hydrogen, aryl, formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyloxycarbonyl;
- $R^{2a}$  is cyano, aminocarbonyl, mono- or di(methyl)aminocarbonyl,  $C_{1-6}$  alkyl substituted with cyano, aminocarbonyl or mono- or di(methyl)aminocarbonyl,  $C_{2-6}$  alkenyl substituted with cyano, or  $C_{2-6}$  alkynyl substituted with cyano;
- each R<sup>2</sup> independently is hydroxy, halo, C<sub>1-6</sub>alkyl optionally substituted with cyano or -C(=0)R<sup>6</sup>, C<sub>3-7</sub>cycloalkyl, C<sub>2-6</sub>alkenyl optionally substituted with one or more halogen atoms or cyano, C<sub>2-6</sub>alkynyl optionally substituted with one or more halogen atoms or cyano, C<sub>1-6</sub>alkyloxy, C<sub>1-6</sub>alkyloxycarbonyl, carboxyl, cyano, nitro, amino, mono- or di(C<sub>1-6</sub>alkyl)amino, polyhalomethyl, polyhalomethyloxy, polyhalomethylthio, -S(=0)OR<sup>6</sup>,

-7-

#### HANTKE et al.

0480/01219

-NH-S(=0)<sub>p</sub>R<sup>6</sup>, -C(=0)R<sup>6</sup>, -NHC(=0)H, -C(=0)NHNH<sub>2</sub>, -NHC(=0)R<sup>6</sup>, -C(=NH)R<sup>6</sup> or a radical of formula



(c)

wherein each A independently is N, CH or CR6;

- B is NH, 0, S or NR6;
- p is 1 or 2; and
- R<sup>6</sup> is methyl, amino, mono- or dimethylamino or polyhalomethyl;
- L is  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{2-10}$ alkynyl,  $C_{3-7}$ cycloalkyl, whereby each of said aliphatic group may be substituted with one or two substituents independently selected from
  - \* C3-7cycloalkyl,
  - \* indolyl or isoindolyl, each optionally substituted with one, two, three or four substituents each independently selected from halo, C<sub>1-6</sub>alkyl, hydroxy, C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, nitro, amino, polyhalomethyl, polyhalomethyloxy and C<sub>1-6</sub>alkylcarbonyl,
  - \* phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally be substituted with one, two, three, four or five substituents each independently selected from the substituents defined in R<sup>2</sup>; or
- L is -X-R3 wherein
  - R<sup>3</sup> is phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally
    be substituted with one, two, three, four or five substituents each independently selected from the substituents
    defined in R<sup>2</sup>; and
  - x is  $-NH^1-$ , -NE-NE-, -N=N-, -0-, -C(=0)-, -CHOH-, -S-, -S(=0)- or  $-S(=0)_2-$ ;
- Q represents hydrogen,  $C_{1-6}$ alkyl, halo, polyhalo $C_{1-6}$ alkyl or -NR<sup>4</sup>R<sup>5</sup>; and
- $R^4$  and  $R^5$  are each independently selected from hydrogen, hydroxy,  $C_{1-12}$ alkyl,  $C_{1-12}$ alkyloxy,  $C_{1-12}$ alkyloxycarbonyl,  $C_{1-12}$ alkyloxycarbonyl, aryl, amino, mono- or di $(C_{1-12}$ alkyl)amino, mono- or di $(C_{1-12}$ alkyl)aminocarbonyl

- 8 -

051216

#### HANTKE et al.

0480/01219

wherein each of the aforementioned  $C_{1-12}$ alkyl groups may optionally and each individually be substituted with one or two substituents each independently selected from hydroxy,  $C_{1-6}$ alkyloxy, hydroxyc<sub>1-6</sub>alkyloxy, carboxyl,  $C_{1-6}$ alkyloxycarbonyl, cyano, amino, imino, mono- or di( $C_{1-6}$ alkyl)amino, polyhalomethyl, polyhalomethyloxy, polyhalomethylthio,  $-S(O)_pR^6$ ,  $-NH-S(=O)_pR^6$ ,  $-C(=O)_R^6$ ,  $-NHC(=O)_H$ ,  $-C(=O)_NHNH_2$ ,  $-NHC(O)_R^6$ ,  $-C(=NH)_R^6$ , aryl and Het; or

R4 and R5 taken together may form pyrrolidinyl, piperidinyl, morpholinyl, azido or mono- or di(C<sub>1-12</sub>alkyl)aminoC<sub>1-4</sub>-alkylidene;

represents hydroxy, halo,  $C_{3-7}$ cycloalkyl,  $C_{2-6}$ alkenyl optionally substituted with one or more halogen atoms,  $C_{2-6}$ alkynyl optionally substituted with one or more halogen atoms,  $C_{1-6}$ alkyl substituted with cyano or  $-C(=0)R^6$ ,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxyarbonyl, carboxyl, cyano, nitro, amino, mono- or  $di(C_{1-6}$ alkyl)amino, polyhalomethyl, polyhalomethyloxy, polyhalomethylthio,  $-S(=0)_pR^6$ ,  $-NH-S(=0)_pR^6$ ,  $-C(=0)R^6$ , -NHC(=0)H,  $-C(=0)NHNH_2$ ,  $-NHC(=0)R^6$ ,  $-C(NH)R^6$  or aryl;

arylis phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo,  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy, cyano, nitro, polyhalo $C_{1-6}$ alkyl and polyhalo $C_{1-6}$ alkyloxy;

Het is an aliphatic or aromatic heterocyclic radical; said aliphatic heterocyclic radical is selected from pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, morpholinyl, tetrahydrofuranyl and tetrahydrothienyl wherein each of said aliphatic heterocyclic radical may optionally be substituted with an oxo group; and said aromatic heterocyclic radical is selected from pyrrolyl, furanyl, thienyl, pyridinyl, pyrimidinyl, pyrazinyl and pyridazinyl wherein each of said aromatic heterocyclic radical may optionally be substituted with hydroxy,

or a compound of formula III

a N-oxide, a pharmaceutically acceptable addition salt, a quaternary amine or a stereochemically isomeric form thereof, wherein

-9-

051216

#### HANTKE et al.

0480/01219

-a1-a2-a3-a4- represents a bivalent radical of formula

-CH=CH-CH=CH- (a-1); -N=CH-CH=CH- (a-2); -N=CH-N=CH- (a-3); -N=CH-CH=N- (a-4);

-N=CH-CH=N- (a-4); -N=N-CH=CH- (a-5);

n is 0, 1, 2, 3 or 4; and in case  $-a^1=a^2-a^3=a^4-$  is (a-1), then n may also be 5;

R<sup>1</sup> is hydrogen, aryl, formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkyl substituted with formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyloxycarbonyl; and

each  $R^2$  independently is hydroxy, halo,  $C_{1-6}$ alkyl optionally substituted with cyano or  $-C(=0)R^4$ ,  $C_{3-7}$ cycloalkyl,  $C_{2-6}$ alkenyl optionally substituted with one or more halogen atoms or cyano,  $C_{2-6}$ alkynyl optionally substituted with one or more halogen atoms or cyano,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxycarbonyl, carboxyl, cyano, nitro, amino, mono- or di( $C_{1-6}$ alkyl)amino, polyhalomethyl, polyhalomethyloxy, polyhalomethylthio,  $-S(=0)_pR^4$ ,  $-NH-S(=0)_pR^4$ ,  $-C(=0)R^4$ , -NHC(=0)R,  $-C(=0)NHNH_2$ ,  $NHC(=0)R^4$ ,  $-C(=NH)R^4$  or a radical of formula



wherein each A independently is N, CH or CR4;

- B is NH, 0, S or NR<sup>4</sup>;
- p is 1 or 2; and
- R4 is methyl, amino, mono- or dimethylamino or polyhalomethyl;
- L is  $C_{4-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{2-10}$ alkynyl,  $C_{3-7}$ cycloalkyl, whereby each of said aliphatic group may be substituted with one or two substituents independently selected from
  - \* C<sub>3-7</sub>cycloalkyl,
  - \* indolyl or isoindolyl, each optionally substituted with one, two, three or four substituents each independently selected from halo, C<sub>1-6</sub>alkyl, hydroxy, C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, nitro, amino, polyhalomethyl, polyhalomethyloxy and C<sub>1-6</sub>alkylcarbonyl,

#### HANTKE et al.

0480/01219

- \* phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally be substituted with one, two, three, four or five substituents each independently selected from the substituents defined in R<sup>2</sup>; or
- L is -X-R3 wherein
  - R3 is phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally
    he substituted with two, three, four or five substituents
    each independently selected from the substituents defined
    in R<sup>2</sup>; and
  - X is  $-NR^1$ -, -NH-NH-, -N=N-, -C(=0)-, -CHOH-, -S-, -S(=0)- or  $-S(=0)_2$ -;
- aryl is phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo,  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy, cyano, nitro, polyhalo $C_{1-6}$ alkyl and polyhalo $C_{1-6}$ alkyloxy,

or a compound of formula IV

$$\begin{array}{c|c}
R_1 & R_2 \\
 & R_3 & R_6
\end{array}$$
(IV)

the pharmaceutically acceptable acid addition salts and the stereochemically isomeric forms thereof, wherein

- R1 and R2 are each independently selected from hydrogen; hydroxy; amino; C<sub>1-6</sub>alkyl; C<sub>1-6</sub>alkyloxy; C<sub>1-6</sub>alkylcarbonyl; C<sub>1-6</sub>alkyloxy-carbonyl; Ar1; mono- or di(C<sub>1-6</sub>alkyl)amino; mono- or di(C<sub>1-6</sub>alkyl)aminocarbonyl; dihydro-2(3H)-furanone; C<sub>1-6</sub>alkyl substituted with one or two substituents each independently selected from amino, imino, aminocarbonyl, aminocarbonylamino, hydroxy, hydroxyc<sub>1-6</sub>alkyloxy, carboxyl, mono- or di(C<sub>1-6</sub>alkyl)amino, C<sub>1-6</sub>alkyloxycarbonyl and thienyl; or
- R<sup>1</sup> and R<sup>2</sup> taken together may form pyrrolidinyl, piperidinyl, morpholinyl, azido or mono- or di(C<sub>1-6</sub>alkyl)aminoC<sub>1-4</sub>-alkylidene;
- $R^3$  is hydrogen,  $Ar^1$ ,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxycarbonyl, carbonyl,  $C_{1-6}$ alkyl substituted with  $C_{1-6}$ alkyloxycarbonyl, and

#### HANTKE et al.

0480/01219

- $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are each independently selected from hydrogen, hydroxy, halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, aminocarbonyl, nitro, amino, trihalomethyl or trihalomethyloxy;
- L is  $C_{1-10}$ alkyl,  $C_{3-10}$ alkenyl;  $C_{3-10}$ alkynyl;  $C_{3-7}$ cycloalkyl, or
- L is  $C_{1-10}$ alkyl substituted with one or two substituents independently selected from  $C_{3-7}$ cycloalkyl;

indolyl or indolyl substituted with one, two, three or four substituents each independently selected from halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, aminocarbonyl, nitro, amino, trihalomethyl, trihalomethyloxy,  $C_{1-6}$ alkylcarbonyl;

phenyl or phenyl substituted with one, two, three, four or five substituents each independently selected from halo, hydroxy,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, aminocarbonyl, nitro, amino, trihalomethyl, trihalomethyloxy,  $C_{1-6}$ alkylcarbonyl; and,

Ar<sup>1</sup> is phenyl, or phenyl substituted with one, two or three substituents each independently selected from halo,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxy, cyano, nitro or trifluoromethyl;

with the proviso that compounds (a) to (o)

Co. No.	Alk	R <sup>1</sup> /R <sup>2</sup>	R <sup>3</sup>	R <sup>4</sup>	R <sup>5</sup>	Re.	R <sup>7</sup>	₽8
а	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	Н	CH <sub>3</sub>	·H	H·_	Н	H
b ·	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	Н	Н	Ι	NO <sub>2</sub>	Н	н
C	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	С₅Н₅	н	Ξ	I	н	н
d	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	Н	NO <sub>2</sub>	Ħ	CH <sub>3</sub>	Н	Ħ
e	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	н	Н	Ξ	NH <sub>2</sub>	Н	H.
f	4(2-methylpropyl)phenylmethyl	H/H	н	н	CF <sub>3</sub>	Ι	H	Н
g	1-(4-(2-methylpropyl)phenyl)ethyl	H/H	Н	Н	Н	CI	Н	Н
h	4-(2-methylpropyl)phenylmethyl	H/H	н	H	Н	Н	. Н	Н
i	3,4-dimethoxyphenylmethyl	H/H	Н	H	H	H.	Н	H
j	2,3-dimethoxyphenylmethyl	H/H	Н	Н	Н	Н	Н	H
k	3,4-diethoxyphenylmethyl	H/H	Н	Н	Η	·H	Н	Н
ı	2-(3,5-(1,1-dimethylethyl)-4-hydroxy-phenyl)ethyl	H/H	Н	H	Н	Н	Ħ	Н
ù	2-(3,5-(1,1-dimethylethyl)-4-hydroxy-phe- nyl)ethyl	Н/Н	Н	H	t-Bu	ОН	t-Bu	H
n	Phenylmethyl	H/H	Н	CH <sub>3</sub>	Н	Н	Н	Н
٥	Phenylmethyl	H/H	Н	Н	Н	Н	Н	H

are not included,

or a compound of formula V

Fax sent by : 2026590105

Serial No. 10/088,400

#### HANTKE et al.

0480/01219

$$\begin{array}{c}
N \\
N \\
CH_2 O CH_2
\end{array}$$

$$\begin{array}{c}
CH_2 O CH_2
\end{array}$$

$$\begin{array}{c}
N \\
N \\
R^3
\end{array}$$

$$\begin{array}{c}
R^4
\end{array}$$

$$\begin{array}{c}
N \\
R^4
\end{array}$$

the N-oxide forms, the pharmaceutically acceptable acid addition salts and stereochemically isomeric forms thereof, wherein

n is zero, 1, 2 or 3;

X is N or CH;

each R<sup>1</sup> independently is halo, nitro, cyano, amino, hydroxy, C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkyloxy or trifluoromethyl;

 $R^2$  is hydrogen;  $C_{3-7}$ alkenyl;  $C_{3-7}$ alkynyl, aryl;  $C_{3-7}$ cycloalkyl;  $C_{1-6}$ alkyl or  $C_{1-6}$ alkyl substituted with hydroxy,  $C_{1-4}$ alkyloxy,  $C_{3-7}$ cycloalkyl or aryl;

 $R^3$  and  $R^4$  each independently are hydrogen,  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl or aryl; or

 $\mathbb{R}^3$  and  $\mathbb{R}^4$  taken together form a bivalent radical  $-\mathbb{R}^3-\mathbb{R}^4-$  of formula:

wherein  $R^{5a}$ ,  $R^{5b}$ ,  $R^{5c}$ ,  $R^{5d}$  each independently are hydrogen,  $C_{1-6}$ alkyl or aryl; and

aryl is phenyl or phenyl substituted with one, two or three substituents selected from halo, nitro, cyano, amino, hydroxy,  $C_{1-4}$ alkyloxy or trifluoromethyl,

or a compound of formula VI

the N-oxides, the stereochemically isomeric forms thereof, and the pharmaceutically acceptable acid addition salts, wherein A and B taken together form a bivalent radical of formula:

**- 13 -**

051216

#### HANTKE et al.

0480/01219

-N=CH- (a), -CH=N- (b), -CH<sub>2</sub>-CH<sub>2</sub>- (c), -CH=CH- (d), -C(=0)-CH<sub>2</sub>- (e), -CH<sub>2</sub>-C(=0)- (f),

in the bivalent radicals- of formula (a) and (b) the hydrogen atom may be replaced by  $C_{1-6}$ alkyl; in the bivalent radicals of formula (c), (d), (e), (f), one or two hydrogen atoms may be replaced by  $C_{1-6}$ alkyl;

- R1 is hydrogen, C1-6alkyl or halo;
- R<sup>2</sup> is hydrogen or halo;
- $R^3$  is hydrogen;  $C_{1-8}$ alkyl;  $C_{3-6}$ cycloalkyl; or  $C_{1-8}$ alkyl substituted with hydroxy, oxo,  $C_{3-6}$ cycloalkyl or aryl;

Het is a heterocycle selected from the group consisting of pyridine; pyridine substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)amino or aryl;

pyrimidine; pyrimidine substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)-amino or aryl;

tetrazole; tetrazole substituted with C1-6alkyl or aryl;

triazole; triazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)-amino;

thiadiazole; thiadiazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)-amino;

oxadiazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or  $di(C_{1-6}$ alkyl)amino;

imidazole; imidazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)amino;

thiazole; thiazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)amino;

#### HANTKE et al.

0480/01219

oxazole; oxazole substituted with one or two substituents selected from  $C_{1-6}$ alkyl, hydroxy,  $C_{1-6}$ alkyloxy, trihalomethyl, amino, mono- or di( $C_{1-6}$ alkyl)amino;

- aryl is phenyl or phenyl substituted with  $C_{1-6}$ alkyl or halo, and the heterocyclic radical "Het" is bound to the sulfur atom via a carbon atom.
- (original) Particles according to claim 1, wherein the copolymer of N-vinylpyrrolidone is a copolymer with vinyl acetate.
- 3. (canceled)
- 4. (currently amended) Particles according to claim 1, which comprise a surfactant and wherein the surfactant is a PEG-n-hydrogenated castor oil, or a low molecular weight polyoxyethylene polyoxypropylene block copolymer.
- 5. (canceled)
- 6. (previously presented) Particles according to claim 1, further comprising citric acid in amounts of up to 5% b.w.
- 7. (previously presented) Particles according to claim 1, wherein the homo- or copolymer of N-vinylpyrrolidone is used in amounts of from 40 to 70% b.w. of the total weight of the dosage form.
- 8. (original) Particles according to claim 7, wherein the homo- or copolymer of N-vinylpyrrolidone is used in amounts of from 50 to 65 % b.w..
- 9. (canceled)
- 10. (previously presented) Particles according to claim 1, wherein the controlled release is a sustained release.
- 11. (currently amended) Particles according to claim 10, further comprising the hydroxypropyl methyl cellulose in amounts of from 5 to 10 % b.w..
- 12. (previously presented) Particles according to claim 1, obtained by forming a homogeneous mixture of the components in the form of a melt, extruding said mixture and shaping of the extrudate.
- 13. (previously presented) Particles according to claim 1, comprising a compound selected from the group consisting of

#### HANTKE et al.

0480/01219

```
4-[[4-[(2,4,6-trimethylphenyl)amino]-2-pyrimidyl]amino]benzoni-
trile;
4-[[2-[(cyanophenyl)amino]-4-pyrimidinyl]amino]-3,5-dimethylben-
zonitrile;
4-[[4-amino-5-chloro-6-[(2,4,6-trimethylphenyl)amino]-2-pyrimi-
dinyl]-amino]benzonitrile;
4-[[5-chloro-4-[(2,4,6-trimethylphenyl)amino]-2-pyrimidinyl]ami-
no]benzonitrile;
4-[[5-bromo-4-(4-cyano-2,6-dimethylphenoxy)-2-pyrimidin]amino]-
benzonitrile;
4-[[4-amino-5-chloro-6-[(4-cyano-2,6-dimethylphenyl)amino]-2-py-
rimidinyl jamino benzonitrile;
4-[[5-bromo-6-[(4-cyano-2,6-dimethylphenyl)amino]-2-pyrimidi-
nyl j-amino jbenzonitrile;
4-[[4-amino-5-chloro-6-[(4-cyano-2,6-dimethylphenoxy)-2-pyrimi-
dinyl]amino]benzonitrile;
4-[[4-amino-5-bromo-6-(4-cyano-2,6-dimethylphenyloxy)-2-pyrimi-
dinyl amino benzonitrile;
4-[[4-[(2,4,6-trimethylpheny)amino]-1,3,5-triazin-2-yl]-amino]-
benzonitrile;
4-[[4-amino-6-[(2,6-dichlorophenyl)methyl]-1,3,5-triazin-2-yl]-
amino|benzonitrile;
4-[[4-[(2,6-dichlorophenyl)methyl]-6-(hydroxyamino)-1,3,5-tri-
azin-2-yl]amino}benzonitrile;
1[4-[4-[4-[4-(2,4-difluorophenyl)-4-(1H-1,2,4-triazol-1-yl-me-
thyl)-1,3-dioxolan-2-yl]methoxy]phenyl)-1-piperazinyl]-phe-
nyl]-3-(1-methylethyl)-2-imidazolidinone;
                   4alpha(S*)]]-4-[4-[4-[4-[[2-(4-chlorophenyl)-2-
(-)-[2S-[2alpha,
[[(4-methyl-4H-1,2,4-triazol-3-yl)thio]methyl]-1,3-dioxolan-4-
yl]methoxyl]phenyl]-1-piperazinyl]phenyl]-2,4-dihy-
dro-2-(1-methyl-propyl)-3H-1,2,4-triazol-3-one,
a N-oxide, a pharmaceutically acceptable addition salt or a ster-
eochemically isomeric form thereof.
```

- 14. (previously presented) Pharmaceutical dosage form, comprising particles according to a claim 1.
- 15. (currently amended) Pharmaceutical dosage forms according to claim 13 14, further comprising one or more pharmaceutically acceptable excipients.

- 16 -

#### HANTKE et al.

0480/01219

- 16. (currently amended) Particles according to claim  $\frac{1}{4}$ , which meet one or both of the following requirements:
  - the surfactant has a HIB-value of from 10 to 18;
  - the surfactant is present in the particles in an amount of from 5 to 20% by weight.
- 17. 19. (canceled)
- 20. (currently amended) Particles according to claim 1, consisting essentially of the active ingredient,

from 40 to 70% by weight of the a homo- or copolymer of N-vinyl-pyrrolidone,

from 5 to 20% by weight of the surfactant,

- up to 5% by weight of citric acid, and
- up from 5 to 25% by weight of hydroxypropyl methyl cellulose.
- 21. (previously presented) Particles according to claim 20, wherein the surfactant has a HLB-value of from 10 to 18.
- 22. (previously presented) Particles according to claim 21, wherein the surfactant is a PEG-n-hydrogenated castor oil and/or a low molecular weight polyoxyethylene polyoxypropylene block copolymer.
- 23. (previously presented) Particles according to claim 1, obtained by a process comprising forming a homogeneous mixture of the components in the form of a melt, extruding said melt and shaping the obtained extrudate.
- 24. (previously presented) Particles according to claim 16, obtained by a process comprising forming a homogeneous mixture of the components in the form of a melt, extruding said melt and shaping the obtained extrudate.
- 25. (previously presented) Particles according to claim 20, obtained by a process comprising forming a homogeneous mixture of the components in the form of a melt, extruding said melt and shaping the obtained extrudate.

# This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

### **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

BLACK BORDERS

IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

FADED TEXT OR DRAWING

BLURRED OR ILLEGIBLE TEXT OR DRAWING

SKEWED/SLANTED IMAGES

COLOR OR BLACK AND WHITE PHOTOGRAPHS

GRAY SCALE DOCUMENTS

LINES OR MARKS ON ORIGINAL DOCUMENT

REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

## IMAGES ARE BEST AVAILABLE COPY.

**□** OTHER: \_\_\_\_\_

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.